

[54] **ENVIRONMENTALLY PROTECTED
ELECTRONIC NETWORK STRUCTURE AND
HOUSING COMBINATION**

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[57] **ABSTRACT**

To provide for simplified and less expensive manufacture without extensive insulation of internal components of a control system with respect to the housing, particularly for electronic ignition and fuel injection control systems; digital and other automotive control electronic systems and the like, a housing (1) of insulating plastic material has a connecting portion (2, 3) integrally formed therewith, which further include, integrally formed therewith, holding and engagement catches and slits (13, 15, 17-23; 62, 69) for a printed circuit board (41) carrying electronic network elements (42) such as transistors, capacitors, resistors, in integrated circuit form, or as discrete elements; and further a cooling device (24, 25; 56; 64; 73) in heat-conductive relationship to a power stage (43; 54; 65; 74) to dissipate heat generated within the power stage, and to transfer the heat over a large area surface connection either to a structural component carrying the entire control unit and/or to a sheet metal cover (49) snapped and crimped over the plastic housing (1) and, in sealed relation, closing off the entire structural unit.

15 Claims, 7 Drawing Figures

